

X: Engine Axial Direction; Y: Tangential Direction; Z: Radial Direction
 X': Secondary Orientation; Y': Secondary Orientation; Z': Primary Orientation

FIG 1. CRYSTAL ORIENTATION RELATIVE TO THE ENGINE ORIENTATIONS

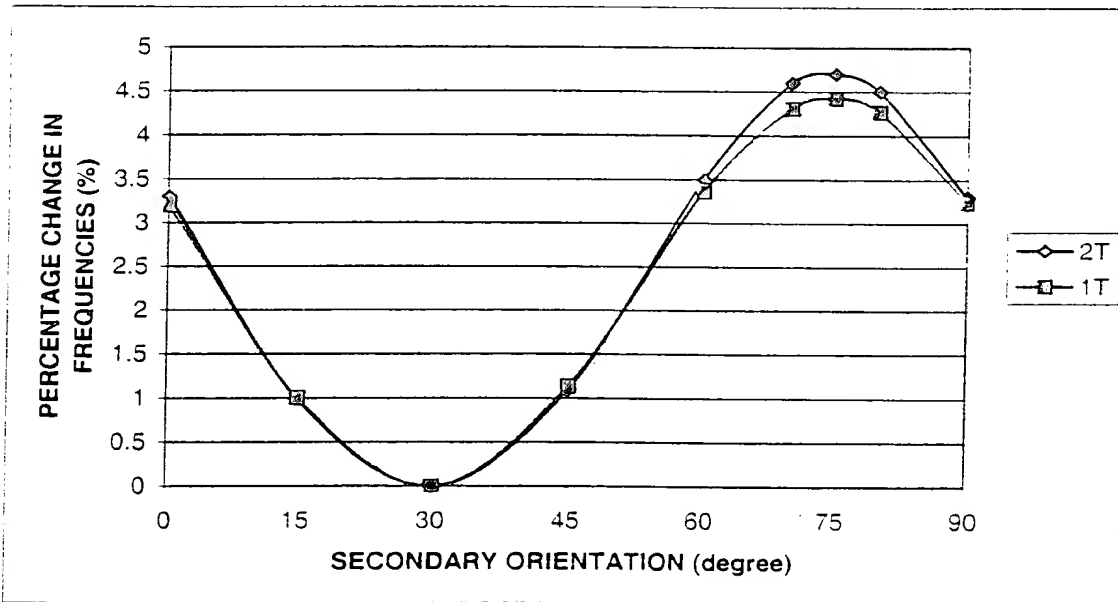


FIG 2. EFFECT OF SECONDARY ORIENTATION ON 1T AND 2T FREQUENCIES

Secondary Orientation Effect on Stripe Modes

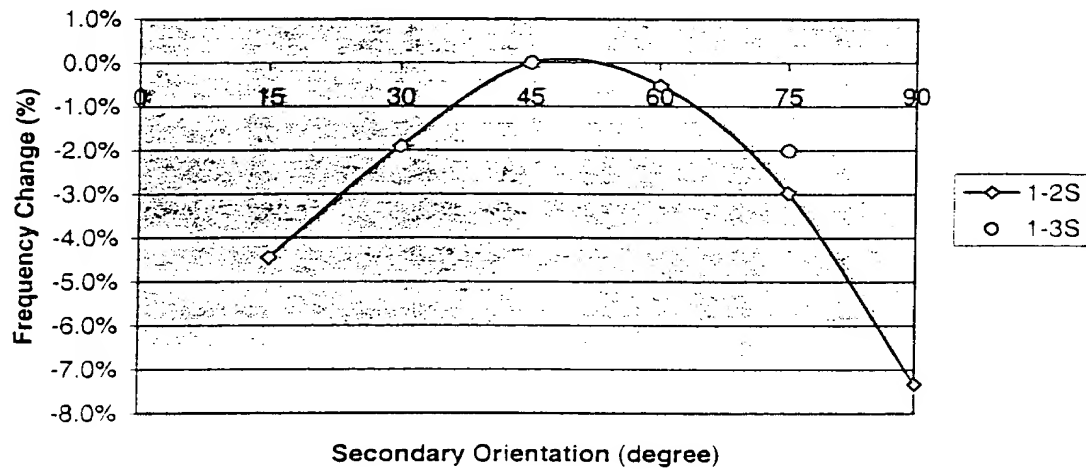


FIG. 3 EFFECT OF SECONDARY ORIENTATION ON 1-2S AND 1-3S FREQUENCIES